

Authors: Xiao-Wei Jiang, John Cherry, and Li Wan

Review conclusion, Special issue handling editor: Okke Batelaan

Dear Authors,

as handling-editor for this special issue I like to thank you for your contribution. We now have received two reviews for your manuscript (MS), and you have replied on their comments. I appreciate the thoughtful comments of the reviewers and your replies. The MS is certainly of interest and value for this special issue.

Having gone over the MS myself, and the raised comments, I do agree with these comments and believe that the paper would become clearer, easier to read and more impactful if you would consider the raised comments in a revised MS.

Especially, I would like to stress the following points:

1. the paper can indeed be shortened and written more concise (referee 1). In addition, I notice some unnecessary repetition in the text. This all requires a very careful re-evaluation of each paragraph and what it adds to the total story (and if not already mentioned before). Some examples (but this is certainly not all) are:

-abstract, line 16 and further is an example of the style of writing that you should try to avoid. Another example is line 46-54, extremely long, difficult to understand sentence.

-the introduction can certainly be shortened; it goes into too much detail of aspects that are later (again) discussed.

-section 2 is noted (referee 1) to benefit from more focus. I would keep it still in the MS but shorten it, and maybe restructure it.

-section 7 is very long and would benefit from trimming.

2. Referee 1 does not agree with the main thesis of the paper that “flowing wells... led to the birth of many fundamental concepts and principles of groundwater hydrology”. Although, I can see the merit and value in raising attention for this thesis, I am afraid that the style of presentation of the text and building up the arguments for this thesis have not helped the MS in providing a convincing thesis. Again, the above-mentioned line 46-54 is an example. Reconsidering how in the introduction to state the thesis and in the remaining text to build up the arguments for this thesis, requires some careful restructuring of the text.

3. Referee 2, point 1 and 3. Indeed this are important references, which should be investigated for their value and inclusion in this MS.

4. Referee 2, point 2, 5 and 6. I believe that in recent decades we start to use too easily the word ‘paradigm’ to try to stress the importance of a certain ‘progress in science’. As it is the goal of all research to make some level of progress, we need to be careful when to use such a word, i.e. inflation of the meaning might occur quickly. I believe that the referee is trying to tell you that *if* you use ‘paradigm’, you should clearly articulate the arguments why it is a paradigm shift.

5. Referee 1, point 4 and Referee 2, point 4 both raise the issue of geological vs topographical control. My reading of their comments is that a more critical evaluation of the limitations of this differentiation in your MS, would increase the learnings achieved from your manuscript (i.e. learn from the past is a goal of this special issue).

Minor correction: it is 'Davis and De Wiest', Wiest with 'ie'.

I look forward to your revised MS.